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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,468	09/02/2005	Wei-Bin Chang	TW 020011	8280

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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BRIARCLIFF MANOR, NY 10510

EXAMINER

SAINT CYR, LEONARD

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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05/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,468	Applicant(s) CHANG, WEI-BIN	
	Examiner Leonard Saint-Cyr	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 03/06/07 have been fully considered but they are not persuasive.

Applicant argues that Picone does not teach or suggest splitting up results of the group on-reading to obtain individual readings of each individual kanji character in the group (Amendment, page 16).

The examiner disagrees, Picone teaches that when the character occurs as part of a group of kanji characters, the onyomi reading is used. When the character is read by itself, the kunyomi reading is used. The character underlined in Fig. 10(a) alternates between the onyomi reading "jing" and the kunyomi "hito" (page 694, col.2, lines 2 – 9). Reading the character by itself implies splitting up results of the group on-reading to obtain individual readings, since the same underlined character is read differently based on the onyomi and kunyomi readings.

2. Applicant argues that Picone does not teach or suggest storing in a memory reading options with relative frequency of occurrences for user selection of a desired reading (Amendment, page 17).

The examiner disagrees, Picone teaches that an entry in the dictionary contains three essential fields: the kanji sequence, its associated hiragana-like translation, and a probability of occurrence (page 687, col.2, lines 6 – 8). Storing kanji sequence in a

dictionary with its associated hiragana-like translation, and a probability of occurrence implies storing in a memory reading options with relative frequency of occurrences, since hiragana-like translation is referred as reading of the kanji sequence relative to probability of occurrence.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1- 3, 5 - 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Picone et al., (Kanji-to-Hiragana conversion based on a length-constrained N-gram analysis).

As per claim 1, and 8, Picone et al., teach determining automatically a reading of Japanese word, including:

receiving an input string of at least one character representing the Japanese word (fig.1 shows an input string of characters; fig.1; page 686, col.1, lines 6 – 13);

choosing for each character of the Japanese word a corresponding reading (see fig.1) by:

for each character determining whether the character is a kanji, hiragana, or katakana character (segmenting the text of fig.1 implies determining whether the

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character is a kanji, hiragana, or katakana character; fig.1; page 685, col.2, lines 8 – 12; page 686, col.1, lines 6 – 13);

for a hiragana or katakana character choosing the only one reading associated with the character (“hiragana is a representation that is quite close to the actual pronunciation”; fig.1; page 686, col.2, lines 3 – 4);

for a kanji character determining whether or not the immediately preceding character and/or the immediately succeeding character is also a kanji character; and choosing for the kanji character an on-reading associated with the kanji character if the immediately preceding character and/or the immediately succeeding character is also a kanji character, (using onyomi reading when the character occurs as part of a group of kanji characters, and using kunyomi when the character is read by itself imply choosing for the kanji character an on-reading associated with the kanji character if the immediately preceding character and/or the immediately succeeding character is also a kanji character; page 694, col.2, lines 2 – 5);

performing a group on-reading for a group of a plurality of sequential kanji (kanji sequence) characters in the word including the kanji character being converted and choosing a most frequent group reading associated with group (“selecting the most common pronunciation of kanji text” page 686, col.2, lines 14 – 24; fig.1; page 687, col.2, lines 6 – 7);

splitting up results of the group on-reading to obtain individual readings of each individual kanji character in the group, and choosing a kun-reading associated with the

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kanji character otherwise (“when the character is read by itself, the kunyomi reading is used”; page 694, col.2, lines 2 – 9);

concatenating the corresponding readings of each character of the Japanese word, and outputting the concatenated reading (fig.1 shows a concatenated reading output of hiragana, katakana, and kanji; fig.1; page 686, col.2, lines 29 – 31).

As per claims 2, and 3, Picone et al., further disclose choosing a most frequent one of a plurality of kun-readings associated with the kanji character, and a most frequent one of a plurality of on-reading associated with the kanji character (“selecting the most common pronunciation of kanji text” page 686, col.2, lines 14 – 24).

As per claim 5, Picone et al., further disclose that each hiragana character is associated with one reading, and for a hiragana character of the word choosing the associated reading (“hiragana is a representation that is quite close to the actual pronunciation” implies that each hiragana character is associated with one reading; fig.1; page 686, col.2, lines 3 – 4).

As per claim 6, Picone et al., further disclose that each katakana character is associated with a corresponding hiragana character, and the method includes for a hiragana character of the word choosing the reading associated with the hiragana character corresponding to the katakana character (fig.1 shows that each katakana character is associated with a corresponding hiragana character; fig.1).

As per claim 7, Picone et al., further disclose a computer readable storage medium comprising a program product operative to cause a processor to perform the method as claimed in claim 1 ("computer memory"; page 689, col.2, line 19).

As per claims 9, and 11, Picone et al., further disclose storing in a memory reading options with relative frequency of occurrences for user selection of a desired reading ("storing kanji sequence in a dictionary with its associated hiragana-like translation, and a probability of occurrence"; page 687, col.2, lines 6 – 8).

As per claims 10, and 12, Picone et al., further disclose that the reading options are sorted by the relative frequency of occurrences ("low-order and higher order dictionaries"; page 689, col.1, lines 15 – 33).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

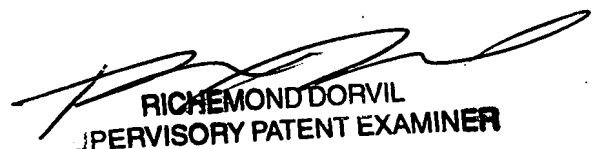
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard Saint-Cyr whose telephone number is (571) 2724247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS
05/15/07


RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER